

REMARKS

This is in response to the Office Action dated March 23, 2009. In view of the foregoing amendments and following representations, reconsideration is respectfully requested.

By the above amendment, claims 1-2 are cancelled; and claims 3-4, 9-14 and 27-30 are amended. Thus, claims 3-32 are currently pending in the present application.

Prior Art Rejection

On page 2 of the previous Office Action, claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (U.S. Patent No. 6,416,837). It is submitted that the present invention, as embodied by the amended claims, now clearly distinguishes over the Kojima reference for the following reasons.

The present invention, as defined in independent claims 3, 4, 27(method) and 29, is directed to an information recording medium having a recording layer that has a high crystallization speed and excellent stability of an amorphous phase because it contains GeTe, M_2Te_3 and Bi_2Te_3 . The M_2Te_3 (where M is at least one element selected from Al, Ga and In) is added to the GeTe- Bi_2Te_3 system in a predetermined proportion. The addition of M_2Te_3 can raise the crystallization temperature without causing phase separation due to repeated recording. This characteristic makes it possible to record information on the information recording medium having the claimed recording layer at a high linear velocity and over a wide range of linear velocities.

Kojima, on the other hand, only discloses the addition of Sn, Al and In to GeBiTe, and thus Kojima does not disclose a recording layer comprising a Ge-Bi-Te-M-based material (where

"M" represents at least one element selected from Al, Ga and In) which is specifically defined by the formulas set forth in amended independent claims 3, 4, 27 and 29. Also, Kojima does not disclose or suggest that the specific elements, i.e. In and Al, are added for the purpose of achieving high-speed recording.

Further, in the Kojima reference, Sn, In and Al are merely listed together with (twelve) other elements. Clearly, Kojima does not disclose or suggest that the particular tellurides, that is, Ga_2Te_3 , and Al_2Te_3 , are combined with a particular binary system, i.e. Ge-Te- Bi_2Te_3 for the purpose of obtaining an information recording medium that is adapted to permit recording at a higher linear velocity and in a wide range of linear velocities. Furthermore, it is noted that Kojima does not even mention the need for recordation at a high linear velocity and in a wide range of linear velocities.

In view of the above, it is submitted that one of ordinary skill in the art would not have been motivated to use the combination of M_2Te_3 (M being at least one element selected from Al, Ga and In) and the Ge-Te- Bi_2Te_3 system for the recording layer of a recording medium based on the teachings of Kojima, and thus, it is submitted that the present invention is clearly allowable over Kojima.

Obviousness-type Double Patenting Rejection

On page 3 of the Office Action, claims 1-32 are rejected on the ground of obviousness-type double patenting as being unpatentable over claim 38 of U.S. Patent No. 6,416,837 (Kojima). However, the Kojima reference qualifies as "prior art" under 35 U.S.C. 102(b), and therefore can be applied in a rejection under 35 U.S.C. 102(b)/103(a). Accordingly, an

obviousness-type double patenting rejection is not applicable in the present case because this type of rejection should only be applied if the patent issued less than a year before the filing date of the present application. MPEP 804(B)(1) and MPEP 1504.06(II).

In view of the above, it is submitted that the present application is now clearly in condition for allowance. The Examiner therefore is requested to pass this case to issue.

In the event that the Examiner has any comments or suggestions of a nature necessary to place this case in condition for allowance, then the Examiner is requested to contact Applicant's undersigned attorney by telephone to promptly resolve any remaining matters.

Respectfully submitted,

Rie KOJIMA et al.

By:



Michael S. Huppert
Registration No. 40,268
Attorney for Applicants

MSH/kjf
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
April 23, 2009